

Translation

PATENT COOPERATION TREATY

PCT/EP2003/004605



PCT

10/518,230

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70) Rec'd PCT/PTO 23 JUN 2005

Applicant's or agent's file reference 40cdh/229011	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/004605	International filing date (day/month/year) 02 May 2003 (02.05.2003)	Priority date (day/month/year) 04 July 2002 (04.07.2002)
International Patent Classification (IPC) or national classification and IPC F28F 9/00		
Applicant HYDAC S.A.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 04 November 2003 (04.11.2003)	Date of completion of this report 12 July 2004 (12.07.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/004605

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
pages _____ 1-9 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the claims:
pages _____ 1-12 _____, as originally filed
pages _____, as amended (together with any statement under Article 19
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the drawings:
pages _____ 1/3-3/3 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	2-7, 9-11	YES
	Claims	1, 8, 12	NO
Inventive step (IS)	Claims		YES
	Claims	1-12	NO
Industrial applicability (IA)	Claims	1-12	YES
	Claims		NO

2. Citations and explanations

1. Reference is made to the following document:

D1: DE 42 32 366 A

2. The present application does not meet the requirements of PCT Article 33(2) since the subject matter of claims 1, 8 and 12 is not novel.

2.1 Claim 1

D1, which is considered the closest prior art, discloses (see figure 1):

a heat-exchange device, with a heat-exchanger block which is delimited on one side by an inflow chamber (12) and on the opposite side by an outflow chamber (13) for the supply and discharge of the medium, and which comprises fluid paths (14) for the medium that extend through the block from the inflow chamber (12) to the outflow chamber (13) and are separated from each other by flow paths, arranged therebetween, for the passage of the other flowable medium, and a cover plate (23) which, covering the fluid paths (14) and flow paths, extends from the inflow chamber (12) to the outflow chamber (13) and

- closes the block at one end (column 6, lines 11 to 19), the cover plate (23) comprising at least one inner through channel (43; column 6, lines 26 to 28) which, bypassing the fluid paths (14), extends as an auxiliary flow duct from the inflow chamber (12) to the outflow chamber (13), can be blocked by at least one pressure-limiting device (24) and can be opened by the opening of the device (24; column 5, lines 50 to 66) owing to a differential pressure that prevails between the inflow chamber (12) and outflow chamber (13) and exceeds a predetermined threshold value (column 5, lines 50 to 57).

Therefore the subject matter of claim 1 is not novel (PCT Article 33(2)).

2.2 Claims 8 and 12

D1 further discloses a heat-exchange device wherein

- (claim 8) a non-return valve in the form of a spring-loaded seat is provided as the pressure-limiting device (column 5, lines 53 to 62)
- (claim 12) the pressure-limiting device (24) consists of a pressure-controlled closure part (column 6, lines 2 to 4).

Therefore the subject matter of claims 8 and 12 is not novel either (PCT Article 33(2)).

3. Dependent claims 2 to 7 and 9 to 11 do not contain any features which, combined with the features of any claim to which they refer, meet the PCT inventive step requirements since these features are only some of the several obvious possibilities from which a person skilled in the art would choose,

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according to the circumstances, to solve the
problems of interest, without thereby being
inventive.